

**Carly J. Leonard**  
Curriculum Vita

**Campus Address**

Department of Psychology  
University of Colorado Denver  
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**Education**

2008, Ph.D., Johns Hopkins University, Psychological & Brain Sciences

2003, M.A., Johns Hopkins University, Psychological & Brain Sciences

2002, B.A., Summa Cum Laude, Rutgers University, Majors: Psychology, Economics, Minor: Cognitive Science

**Professional Experience**

2016 – current, Assistant Professor, Department of Psychology, University of Colorado Denver

2014 – 2016, Project Scientist, Center for Mind and Brain, University of California, Davis.

2008 – 2014, Postdoctoral Fellow, Center for Mind and Brain, University of California, Davis. Training in laboratory of Dr. Steven Luck and collaboration with Dr. James Gold at Maryland Psychiatric Research Center.

2003 – 2008, Graduate Research Fellow / Graduate Teaching Assistant, Department of Psychological & Brain Sciences, Johns Hopkins University. Training in laboratory of Dr. Howard Egeth.

2002 – 2003, Research Assistant, Rutgers Center for Cognitive Science, Rutgers University.

2000 – 2002, Undergraduate Research Assistant, Rutgers Center for Cognitive Science. Training in laboratory of Dr. Zenon Pylyshyn.

## Peer Reviewed Publications

- 2021        **Leonard, C. J.** Consensus emerges and biased competition wins: A commentary on Luck et al. (2021). *Visual Cognition*.
- 2021        Salagovic, C. A.\* & **Leonard, C. J.**, A nonspatial sound modulates processing of visual distractors in a flanker task. *Attention, Perception, & Psychophysics*, 83(2), 800-809.
- 2021        Bansal, S., Gaspar, J.M., Robinson, B.M., **Leonard, C. J.**, Hahn, B., Luck, S. J., & Gold, J. M. Antisaccade deficits in schizophrenia can be driven by attentional relevance of the stimuli. *Schizophrenia Bulletin*, 47(2), 363-372.
- 2020        Bansal, S., Bae, G-Y. Frankovitch, K, Robinson, B. M., **Leonard, C. J.**, Gold, J. M, & Luck, S. J. Increased repulsion of working memory representations in schizophrenia. *Journal of Abnormal Psychology*, 129(8), 845-857.
- 2020        Hahn, B., Bae, G-Y., Robinson, B. M., **Leonard, C. J.**, Luck, S. J., & Gold, J. M. Cortical hyperactivation at low working memory load: A primary processing abnormality in people with schizophrenia? *Neuroimage: Clinical*, 26, 102270.
- 2020        **Leonard, C. J.**, Robinson, B. M., Hahn, B., Gold, J. M., & Luck, S. J. Increased influence of a previously attended feature in people with schizophrenia. *Journal of Abnormal Psychology*, 129(3), 305-311.
- 2020        Bae, G-Y., **Leonard, C. J.**, Hahn, B., Gold, J. M. & Luck, S. J. Assessing the information content of ERP signals in schizophrenia using multivariate decoding methods. *Neuroimage: Clinical*, 25, 102179
- 2019        Luck, S. J., **Leonard, C. J.**, Hahn, B., & Gold, J. M. Is attentional filtering impaired in schizophrenia? *Schizophrenia Bulletin*, 45(5), 1000-1011.
- 2019        Luck, S. J., Hahn, B., **Leonard, C. J.**, & Gold, J. M. The hyperfocusing hypothesis: A new account of cognitive dysfunction in schizophrenia. *Schizophrenia Bulletin*, 45(5), 991-1000.
- 2019        Koury, H. F., **Leonard, C. J.**, Carry, P. M., & Lee, L. M. J. An expert-derived feedforward histology module improves pattern recognition efficiency in novice students. *Anatomical Sciences Education*, 12(6), 645-654.
- 2018        Hahn, B., Robinson, B. M., **Leonard, C. J.**, Luck, S. J., & Gold, J. M. Posterior parietal cortex dysfunction is central to working memory storage and broad cognitive deficits in schizophrenia. *Journal of Neuroscience*, 38(39), 8378-8387.
- 2018        Lee, J., **Leonard, C. J.**, Luck, S. J., & Geng, J. J. Dynamics of feature-based attentional selection during color-shape conjunction search. *Journal of Cognitive Neuroscience*, 30(12), 1773-1787.

- 2018 Bansal, S., Robinson, B. M., Geng, J. J., **Leonard, C. J.**, Hahn, B., Luck, S. J., & Gold, J. M. The impact of reward on attention in schizophrenia. *Schizophrenia Research: Cognition*, 12, 66-73.
- 2017 **Leonard, C. J.**, Robinson, B. M., Hahn, B., Luck, S. J., & Gold, J. M. Altered spatial profile of distraction in people with schizophrenia. *Journal of Abnormal Psychology*, 126(8), 1077-1086.
- 2017 Gold, J. M., Robinson, B., **Leonard, C. J.**, Hahn, B., Chen, S., McMahon, R. P., & Luck, S. J. Selective attention, working memory, and executive function as potential independent sources of cognitive dysfunction in schizophrenia. *Schizophrenia Bulletin*, 44(6), 1227-1234.
- 2017 Kreither, J., Lopez-Calderon, J., **Leonard, C. J.**, Robinson, B. J., Ruffle, A., Hahn, B., Gold, J. M., & Luck, S. J. Electrophysiological evidence for hyperfocusing of spatial attention in schizophrenia. *Journal of Neuroscience*, 37(14), 3813-3823.
- 2017 Gaspelin, N., **Leonard, C. J.**, Luck, S. J. (2017). Suppression of overt attentional capture by salient-but-irrelevant color singletons. *Attention, Perception, & Psychophysics*, 79(1), 45-62.
- 2017 Sawaki, R., Leonard, C. J., Kaiser, S. T., Hahn, B., Gold, J.M., Luck, S. J. Hyperfocusing of attention on goal-related information in schizophrenia: Evidence from electrophysiology. *Journal of Abnormal Psychology*, 126(1), 106-116.
- 2015 Gaspelin, J., **Leonard, C. J.**, & Luck, S. J. Direct evidence for active suppression of salient-but-irrelevant sensory inputs. *Psychological Science*, 26(11), 1740-1750.
- 2015 **Leonard, C. J.**, Balestreri, A., & Luck, S. J. Interactions between space-based and feature-based attention. *Journal of Experimental Psychology: Human Perception and Performance*, 41(1), 11-16.
- 2015 Erickson, M. A., Hahn, B., **Leonard, C. J.**, Robinson, B., Gray, B., Luck, S. J., & Gold, J. M. Impaired working memory capacity is not caused by failures of selective attention in schizophrenia. *Schizophrenia Bulletin*, 41(2), 366-373.
- 2014 Erickson, M. A., Hahn, B., **Leonard, C. J.**, Robinson, B., Luck, S. J., & Gold, J. M. Enhanced vulnerability to distraction does not account for working memory capacity reduction in people with schizophrenia. *Schizophrenia Research: Cognition*, 1(3), 149-154.
- 2014 Luck, S. J., McClenon, C., Beck, V. M., Hollingworth, A., **Leonard, C. J.**, Hahn, B., Robinson, B., & Gold, J. M. Hyperfocusing in schizophrenia: Evidence from interactions between working memory and eye movements. *Journal of Abnormal Psychology*. 123(4), 783-795.

- 2014 Gray, B. E., Hahn, B., Robinson, B., Harvey, A., **Leonard, C. J.**, Luck, S. J., & Gold, J. M. Relationships between divided attention and working memory impairment in people with schizophrenia. *Schizophrenia Bulletin*, 40(6), 1462-1471.
- 2014 **Leonard, C. J.**, Robinson, B. M., Hahn, B., Gold, J. M., & Luck, S. J. Enhanced distraction by magnocellular salience signals in schizophrenia. *Neuropsychologia*, 56, 359-366.
- 2013 **Leonard, C. J.**, Robinson, B. M., Kaiser, S. T., Hahn, B., McClenon, C., Gold, J. M., & Luck, S. J. Testing sensory and cognitive explanations of the antisaccade deficit in schizophrenia. *Journal of Abnormal Psychology*, 122(4), 1111-1120.
- 2013 **Leonard, C. J.**, Lopez-Calderon, J., Kreither, J., & Luck, S. J. Rapid feature-driven changes in the attentional window. *Journal of Cognitive Neuroscience*, 25(7), 1100-1110.
- 2013 Johnson, M. K., McMahon, R. P., Robinson, B. M., Harvey, A. N., Hahn, B., **Leonard, C. J.**, Luck, S. J., & Gold, J. M. The relationship between working memory capacity and broad measures of cognitive ability in healthy adults and people with schizophrenia. *Neuropsychology*, 27(2), 220-229.
- 2013 **Leonard, C. J.**, Kaiser, S. T., Robinson, B. M., Kappenman, E. S., Hahn, B., Gold, J. M., & Luck, S. J. Toward the neural mechanisms of reduced working memory capacity in schizophrenia. *Cerebral Cortex*, 23, 1582-1592.
- 2012 Hahn, B., Robinson, B. M., Harvey, A. N., Kaiser, S. T., **Leonard, C. J.**, Luck, S. J., & Gold, J. M. Visuospatial attention in schizophrenia: Deficits in broad monitoring. *Journal of Abnormal Psychology*, 121(1), 119-128.
- 2012 Kappenman, E. S., Kaiser, S. T., Robinson, B. M., Morris, S. E., Hahn, B., Beck, V., **Leonard, C. J.**, Gold, J. M., & Luck, S. J. (2012). Response activation impairments in schizophrenia: Evidence from the lateralized readiness potential. *Psychophysiology*, 49(1), 73-84.
- 2012 Hahn, B., Hollingworth, A., Robinson, B. M., Kaiser, S. T., **Leonard, C. J.**, Beck, V. M., Kappenman, E. S., Luck, S. J., & Gold, J. M. Control of working memory content in schizophrenia. *Schizophrenia Research*, 134(1), 70-75.
- 2011 **Leonard, C. J.** & Luck, S. J. The role of magnocellular input in oculomotor attentional capture. *Journal of Vision*, 11(13), 1-12.
- 2010 **Leonard, C. J.** & Luck, S. J. Temporal dynamics of spatial attention. *Visual Cognition*, 18(10), 1522-1525.

- 2010 Egeth, H., **Leonard, C. J.**, & Leber, A. J. Why salience is not enough: Reflections on top-down selection in vision. *Acta Psychologica*, *135*, 130-132.
- 2010 Hahn, B., Robinson, B. M., Kaiser, S. T., Harvey, A. N., Beck, V.M., **Leonard, C. J.**, Kappenman, E. S., Luck, S. J., Gold, J. M. Failure of schizophrenia patients to overcome salient distractors during working memory encoding. *Biological Psychiatry*, *68(7)*, 603-609.
- 2008 **Leonard, C. J.**, & Egeth, H. E. Attentional guidance in singleton search: An examination of top-down, bottom-up, and intertrial factors. *Visual Cognition*, *16(8)*, 1078-1091.
- 2008 Egeth, H., **Leonard, C. J.**, & Palomares, M. (2008). The role of attention in subitizing: Is the magical number one? *Visual Cognition*, *16(4)*, 463-473.
- 2007 **Leonard, C. J.**, & Chiu, Y. What you set is not what you see: Unconscious activation of cognitive control. *Journal of Neuroscience*, *27*, 11170-11171.

## Grants

- 10/2018 – 5/2019 Mini-UROP student project grant, An Investigation of Individual Differences in Biological Motion Perception within the Autism Phenotype, Requested: \$500, Funded: \$500. Role: Mentor for Jada Lister.
- 05/2019 – 04/2022 NIH R15EY030370, Individual differences in information acquisition during active vision, Requested: \$349,875, Funded: \$349,875. Role: PI
- 10/2018 – 5/2019 Mini-UROP student project grant, Influences of Top-Down and Bottom-up Processes on Visual Learning, Requested: \$600, Funded: \$600. Role: Mentor for Tammy Nguyen.
- 10/2018 – 5/2019 Mini-UROP student project grant, An Investigation of Individual Differences in Dopamine and Working Memory, Requested: \$600, Funded: \$600. Role: Mentor for Alexander Morales.
- 4/2018 – 5/2019 UROP student project grant, Intertrial Priming and Event Related Potentials, Requested: \$1200, Funded: \$1200. Role: Mentor for Adam Goldstein.
- 3/2018 – 3/2019 UC Denver Office of Research Services New Faculty Grant, Individual differences in information acquisition strategy, Requested: \$30,000, Funded: \$30,000. Role: PI.
- 10/2017 – 5/2018 Mini-UROP student project grant, The role of implicit and explicit memory on visual search performance, Requested: \$600, Funded: \$600. Role: Mentor for Amber Johnson

- 4/2017 – 5/2018 UROP student project grant, Crossmodal effects of irrelevant auditory stimuli on saccadic eye movement behavior, Requested: \$1200, Funded: \$1200. Role: Mentor for Cailey Salagovic.
- 8/2017 – 5/2018 CU Denver Creative Research Collaborative Fellowship, Images of the “Hyperfocused” Mind: The Effect of Schizophrenia on Visual Art, Requested: \$4000, Funded: \$4000. Role: Co-PI with Dr. Yang Wang
- 2016 & 2017 CU Denver Young Upwardly Mobile Professor Grant, Requested: \$1000, Funded: \$1000
- 2015 UC Davis Academic Federation Research Travel Award, Requested: \$1000, Funded: \$1000

### Other Indicators of Scholarly and Creative Activity

- \* Recognition of research talk presented at the November 2018 meeting in the conference highlights distributed by the Psychonomic Society to its members
- \* As of April 2021, Google Scholar Citation Report shows 1307 citations with h-index = 20.

### Peer Reviewed Talks at Conferences (\* indicates undergraduate student author)

- 2018 **Leonard, C. J.** & Johnson, A.\* Understanding the relationship between intertrial priming in visual search and visual working memory capacity. Talk presented at the annual meeting of the Psychonomic Society in New Orleans, LA.
- 2018 **Leonard, C. J.** Individual differences in visual information processing over space and time. Talk read at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2017 Gold, J. M., Kreither, J., Lopez-Calderon, J., **Leonard, C.**, Robinson, B., Ruffle, A., Hahn, B., & Luck, S. Electrophysiological evidence for hyperfocusing of spatial attention in schizophrenia. Talk read at the annual meeting of the Society for Research in Psychopathology in Denver, CO. Read by J. Gold.
- 2017 **Leonard, C. J.** On the persistence of visual information over time. Talk read at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2017 Gaspelin, N., **Leonard, C. J.**, & Luck, S. J. Mechanisms underlying suppression of attentional capture by salient stimuli. Symposium talk at the annual meeting of the Vision Sciences Society in St. Pete’s Beach, FL. Read by N. Gaspelin.

- 2016 Gaspelin, N., **Leonard, C. J.**, & Luck, S. J. Suppression of covert and overt attentional capture. Talk read at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL. Read by N. Gaspelin.
- 2015 **Leonard, C. J.** Troubles with a taxonomy of (visual) attention. Talk read at the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2015 **Leonard, C. J.**, Hahn, B., Robinson, B., Luck, S. J., Gold, J. G. Atypical interactions of spatial and feature-based attentional guidance in people with schizophrenia. Talk read at the annual meeting of the Psychonomic Society in Chicago, IL.
- 2015 Lee, J., **Leonard, C. J.**, Geng, J. J. Expectancies about target-similar distractors impact target selection. Talk read at the annual meeting of the Society for Neuroscience in Chicago, IL. Read by J. Lee.
- 2014 **Leonard, C. J.**, & Luck, S. J. Probability of spatially proximal distractors modulates feature-driven capture. Talk read at the annual meeting of the Psychonomic Society in Long Beach, CA.
- 2014 **Leonard, C. J.** Troubles with a taxonomy of attention and awareness. Talk read at the 2<sup>nd</sup> annual Northern California Consciousness meeting in Davis, CA.
- 2014 **Leonard, C. J.** & Luck, S. J. Dissecting distraction: Interactions of feature-based attention and spatial attention. Talk read at the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2012 **Leonard, C. J.**, Hahn, B., Gold, J. M., & Luck, S. J. Understanding variation in working memory capacity: A translational approach. Talk read at the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2012 Gold, J. M., **Leonard, C. J.**, Kaiser, S., Robinson, B., Kappenman, E., Hahn, B., & Luck, S. J. Toward a neural mechanism of reduced working memory capacity in schizophrenia. Talk read at the annual meeting of the Society for Research in Psychopathology in Ann Arbor, MI. Read by J. Gold.
- 2011 **Leonard, C. J.** & Luck, S. J. Tracking changes in the attentional window with visual event related potentials. Talk read at the Cognitive Science Association for Interdisciplinary Learning conference in Hood River, OR.
- 2010 **Leonard, C. J.**, & Luck, S. J. Temporal dynamics of spatial attention. Talk read at the Object, Perception, Attention, and Memory meeting in St. Louis, MI.
- 2007 **Leonard, C. J.**, & Egeth, H. Is top-down guidance possible in singleton search? Talk read at the annual meeting of the Psychonomic Society in Long Beach, CA. Read by H. Egeth.

**Peer Reviewed Posters at Conferences** (\* indicates undergraduate student author)

- 2020 Nguyen, L. & **Leonard, C. J.** Personality mediates individual differences in allocation of space-based attention. Poster presented at the annual Object Perception, Attention, and Memory meeting (virtual).
- 2020 **Leonard, C. J.**, Vilanova-Goldstein\*, A., & Cruz, J.\*. Intertrial priming is modulated by visual set size and memory set size in hybrid search. Poster presented at the annual meeting of the Psychonomic Society (virtual).
- 2019 **Leonard, C. J.**, Lister, J.\*, & Salagovic, C. A. Differential use of color and shape cues in visual search. Poster presented at the annual meeting of the Psychonomic Society in Montreal, CA.
- 2019 Vilanova-Goldstein, A. & **Leonard, C. J.** Attention through learning: an electrophysiological investigation of priming in visual search. Poster presented at the annual Object Perception, Attention, and Memory meeting in Montreal, CA.
- 2019 **Leonard, C. J.** & Morales, A.\* The effect of unprovoked eye movements during visual working memory retention. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.
- 2019 Rosicke S.\*, **Leonard C. J.**, Carry P. M., Lee L. M. Does "See One and Do One" Work in Histology?: A Two-Phase Cross-Over Eye Tracking Study on Complex Histological Pattern Recognition Skills Acquisition. AAA. Orlando, FL.
- 2018 Nguyen, T. A.\* & **Leonard, C. J.** Effects of feature cues and target salience on eye movements in singleton search. Poster presented at the annual Object Perception, Attention, and Memory meeting in New Orleans, LA.
- 2018 Vilanova-Goldstein, A.\* & **Leonard, C. J.** The role of intertrial priming in hybrid search tasks. Poster presented at the annual Object Perception, Attention, and Memory meeting in New Orleans, LA.
- 2018 Salagovic, C. & **Leonard, C.** Auditory alerting modulates processing of peripheral visual stimuli in Eriksen flanker task. Poster presented at the annual Auditory Perception, Cognition, and Action Meeting in New Orleans, LA.
- 2018 **Leonard, C. J.**, Dewey, C.\*, & Steed, A.\* The dynamics of eye movement behavior during a contour integration task. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.



- 2018 Salagovic, C.\* & **Leonard, C. J.** What we hear and where we look: Effects of irrelevant auditory stimuli on eye movement behavior. Poster presented at the Rocky Mountain Psychological Association meeting, Denver, CO.
- 2018 Johnson, A.\* & **Leonard, C. J.** The role of implicit and explicit memory in visual search performance. Poster presented at the Rocky Mountain Psychological Association meeting, Denver, CO.
- 2018 Koury H., **Leonard C. J.**, Carry P., & Lee, L. M. J. Monkey-see, Monkey-do: An Eye-tracking Study Assessing the Efficacy of Feed-forward Training in Histology Visual Literacy Development. Poster presented at the Federation of American Societies for Experimental Biology meeting.
- 2018 Koury H., **Leonard C. J.**, Carry P., & Lee, L. M. J. Monkey-see, Monkey-do: An Eye-tracking Study Assessing the Efficacy of Feed-forward Training in Histology Visual Literacy Development. Poster presented at the Western Group for Educational Affairs.
- 2017 Koury, H., **Leonard, C. J.**, & Lee, L. M. J. Monkey-see, monkey-do: An eye movement study assessing the efficacy of feed-forward training in histology visual literacy development. Poster presented at the Education Scholarship and Innovations Symposium, held by the Academy of Medical Educators, University of Colorado School of Medicine, Aurora, CO.
- 2017 Salagovic, C.\* & **Leonard, C. J.** Crossmodal effect of irrelevant auditory stimuli on saccadic eye movement behavior. Poster presented at the Auditory Perception, Cognition, and Action Meeting, in Vancouver, Canada.
- 2017 **Leonard, C. J.**, Robinson, B., Hahn, B., Gold, J. M., & Luck, S. J. Saccadic evidence for spatial hyperfocusing in people with schizophrenia. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.
- 2017 Bansal, S. **Leonard, C. J.**, Frankovich, K., Gold, J. M., & Luck, S. J. Spatial recall performance: Differential landmark bias in schizophrenia. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.
- 2016 **Leonard, C. J.**, Robinson, B., Hahn, B., Gold, J. M., & Luck, S. J. Increased influence of previously attended features in people with schizophrenia. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.
- 2016 Beck, V., **Leonard, C. J.**, Robinson, B., Hahn, B., Hollingworth, A., Gold, J. M., & Luck, S. J. People with schizophrenia demonstrate more optimal feature-guided visual search in a probabilistic search task. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.

- 2016 Gaspelin, N., **Leonard, C. J.**, & Luck, S. J. Suppression of covert and overt attentional capture. Poster presented at the annual meeting of the Vision Sciences Society in St. Pete's Beach, FL.
- 2016 Elliot, M. V.\*, **Leonard, C. J.**, & Luck, S. J. A pupillometric perspective on the attentional prioritization of emotional and task-relevant distraction. Poster presented at the 27<sup>th</sup> annual Undergraduate Research, Scholarship and Creative Activities Conference at the University of California, Davis.
- 2015 Gold, J. M, Sawaki, R., Kaiser, S. K., **Leonard, C. J.**, Hahn, B., & Luck, S. J. Electrophysiological evidence for impaired distractor suppression in schizophrenia. Poster presented at the 15<sup>th</sup> International Congress on Schizophrenia Research in Colorado Springs, CO.
- 2015 Gaspelin, N., **Leonard, C. J.**, & Luck, S. J. Evidence of active suppression of covert and overt attentional capture. Poster presented at the annual meeting of Psychonomic Society in Chicago, IL.
- 2015 **Leonard, C. J.** & Luck, S. J. Feature-driven attentional capture is modulated by the distribution of spatial attention. Poster presented at the annual meeting of the Vision Sciences Society (VSS) in St. Pete's Beach, FL.
- 2015 Lee, J., **Leonard, C. J.**, Geng, J. J. Expectancies about the frequency of a target-similar distractor impact target selection. Poster presented at the annual meeting of the Vision Sciences Society (VSS) in St. Pete's Beach, FL.
- 2013 **Leonard, C. J.**, & Luck, S. J. Feature-driven capture is spatially constrained, not global. Poster presented at the annual meeting of the Psychonomic Society in Toronto, Canada.
- 2013 **Leonard, C. J.**, Robinson, B., Hahn, B., Luck, S. J., & Gold, J. M. Amplification of magnocellular salience signals modulate attentional capture in schizophrenia. Poster presented at the annual meeting of the Society for Research in Psychopathology (SRP) in Oakland, CA.
- 2013 **Leonard, C. J.**, & Luck, S. J. Understanding peripheral interference: the effects of distractor relevance and eccentricity on capture. Poster presented at the annual meeting of the Vision Sciences Society (VSS) in Naples, FL.
- 2012 **Leonard, C. J.**, Carlisle, N. B., & Luck, S. J. Integrating working memory and perception: the precision of attentional guidance in visual search. Poster presented at the annual meeting of the Psychonomic Society in Minneapolis, MN.
- 2012 **Leonard, C. J.**, Carlisle, N. B., & Luck, S. J. Comparing the resolution of a working-memory based target template with the resolution of visual working memory itself. Poster presented at annual meeting of the Vision Sciences Society (VSS) in Naples, FL.

- 2011 **Leonard, C. J.**, & Luck, S. J. The influence of target-distractor spatial proximity on covert competition and overt saccadic selection. Poster presented at the annual meeting of the Psychonomic Society in Seattle, WA.
- 2011 **Leonard, C. J.**, Robinson, B., Kaiser, S., Hahn, B., McClenon, C., Gold, J. M., & Luck, S. J. Dissecting the role of magnocellular and parvocellular input on saccade production in schizophrenia. Poster presented at the Bay Area Vision Research Day (BAVRD) in Berkeley, CA.
- 2011 **Leonard, C. J.**, & Luck, S. J. The attentional blink impairs saccade production. Poster presented at annual meeting of the Vision Sciences Society (VSS) in Naples, FL.
- 2010 **Leonard, C. J.**, & Luck, S. J. Overt and covert capture of attention by magnocellular and parvocellular singletons. Poster presented at annual meeting of the Vision Sciences Society (VSS) in Naples, FL.
- 2010 Markley, C. C.\*, Luck, S. J., **Leonard, C. J.** Links between perceptual hypotheses and response preparation in the human brain. Poster presented at the 2010 California Cognitive Science Conference at the University of California, Berkeley.
- 2009 **Leonard, C. J.** & Egeth, H. Feature-based guidance improves singleton detection during the attentional blink. Poster presented at the annual meeting of the Vision Sciences Society (VSS) in Naples, FL.
- 2008 **Leonard, C. J.**, Moher, J., & Egeth, H. Finding top-down guidance in singleton search: an exploration of critical conditions. Poster presented at annual meeting of the Vision Sciences Society (VSS) in Naples, FL.
- 2007 **Leonard, C. J.**, & Egeth, H. Feature-based attention alleviates the attentional blink for a popout target. Poster presented at the annual Object Perception, Attention, and Memory meeting in Long Beach, CA.
- 2007 **Leonard, C. J.**, & Egeth, H. Differential effects of attention on subitizing and estimation processes. Poster presented at the annual meeting of the Vision Science Society (VSS) in Sarasota, FL.
- 2006 **Leonard, C. J.**, Pierson, R.\*, Palomares, M., & Egeth, H. Selection and enumeration of moving objects. Poster presented at the annual meeting of the Vision Science Society (VSS) in Sarasota, FL.
- 2006 Palomares, M., Torres, L.\*, **Leonard, C.** & Egeth, H. Does subitizing require attention? Poster presented at the annual meeting of the Vision Science Society (VSS) in Sarasota, FL

- 2005 Liu, J.\*, Palomares, M., **Leonard, C.** & Egeth, H. Are enumeration and visual short term memory independent? Poster presented at the annual meeting of the Vision Science Society (VSS) in Sarasota, FL.
- 2004 **Leonard, C. J.**, & Egeth, H. E. The contribution of feature-based attentional guidance to singleton search. Poster presented at the annual Object Perception, Attention, and Memory meeting in Minneapolis, MN.
- 2003 **Leonard, C. J.**, & Pylyshyn, Z.W. Measuring the attentional demand during Multiple Object Tracking. Poster presented at annual meeting of the Vision Science Society (VSS) in Sarasota, FL.
- 2003 Pylyshyn, Z.W. & **Leonard, C. J.** Inhibition of nontargets during Multiple Object Tracking. Poster presented at annual meeting of the Vision Science Society (VSS) in Sarasota, FL.
- 2002 **Leonard, C. J.\***, Pylyshyn, Z. W., Cohen, E. H., & Dennis, J. D. The effect of a secondary monitoring task on Multiple Object Tracking. Poster presented at annual meeting of the Vision Science Society (VSS) in Sarasota, FL.

### **Seminars and Workshops**

- 2020 TBD. Invited talk for departmental colloquium series in the Psychology Department at North Dakota State University.
- 2019 *Examining the relationship between visual working memory and other individual differences.* Invited talk for the Fall Cognitive colloquium series in the Department of Psychological Sciences at Purdue University.
- 2019 *Examining the relationship between visual working memory and other individual differences.* Invited talk for the Fall Colorado State University Brown Bag series in the Department of Psychology.
- 2017 *Variation in the mechanisms of visual selection over space and time.* Invited talk for the Developmental Cognitive Neuroscience program at the University of Denver, Department of Psychology.
- 2016 *Visual attention and working memory in health and disorder.* Invited talk at Oregon State University, Department of Psychology.
- 2015 *Visual attention and working memory in health and disorder.* Invited talk at University of Colorado Denver, Department of Psychology.
- 2015 *Visual attention and working memory in health and disorder.* Invited talk at Trinity College, Department of Psychology.

- 2015 *Mechanisms of attention and their relationship to impairments in people with schizophrenia.* Invited talk for Cognitive and Behavioral Sciences Colloquium Series at Illinois State University, Department of Psychology.
- 2015 *Mechanisms of attention and their relationship to impairments in people with schizophrenia.* Invited talk at Brigham Young University, Department of Psychology, Provo, UT.
- 2015 *Mechanisms of attention: Leveraging visual neuroscience to better understand schizophrenia.* Invited talk at Rutgers University, Department of Psychology, New Brunswick, NJ.
- 2013 *Visual attention and working memory in health and disorder.* Invited talk at the University of Utah, Department of Psychology, Salt Lake City, UT.
- 2013 *The functional integration of working memory, attention, and visual perception.* Invited talk at Hamilton College, Department of Psychology, Colgate, NY.
- 2012 *Integrating working memory and visual perception: Attention in time and space.* Invited talk at Drexel University, Department of Psychology, Philadelphia, PA.
- 2009-2011 *Instructional presentation on using EEGLAB and ERPLAB to perform Independent Component Analysis (ICA) for artifact correction.* Invited presentation at Steve Luck's ERP Bootcamp course, University of California, Davis, CA.
- 2008 *Subitizing and detection during the attentional blink.* Invited talk at the University of California, Davis, Center for Mind and Brain, Davis, CA
- 2008 *The role of attention in subitizing: Is the magical number 1?* Invited talk at Temple University / University of Pennsylvania, Center for Cognitive Neuroscience, Philadelphia, PA.
- 2008 *Attentional guidance in singleton search: An examination of top-down, bottom-up, and intertribal factors.* Invited talk at the University College of London, Institute for Cognitive Neuroscience, London, UK.
- 2007 *On the nature of attentional mechanisms and enumeration.* Invited talk at the Johns Hopkins University, Laboratory for Child Development, Baltimore, MD.

### **Professional Organizations**

- 2018 – present Council on Undergraduate Research, Member
- 2003 – present Psychonomic Society, Fellow - Full member
- 2002 – present Vision Sciences Society, Member
- 2001 – present Psi Chi, The International Honors Society of Psychology, Member

### **Publications in Preparation** (\* indicates undergraduate student author)

**Leonard, C. J.,** Vilanova-Goldstein, A.\*, & Cruz, J.\* Intertrial priming in hybrid visual search, in preparation.

### **Courses Taught**

History of Psychology, PSYC 4511

Department of Psychology, University of Colorado Denver, Denver, CO

Human Cognition, PSYC 3144

Department of Psychology, University of Colorado Denver, Denver, CO

Psychology of Perception, PSYC 4164

Department of Psychology, University of Colorado Denver, Denver, CO

Directed Research in Psychology, PSYC 4880

Department of Psychology, University of Colorado Denver, Denver, CO

Independent Study in Psychology, PSYC 4840

Department of Psychology, University of Colorado Denver, Denver, CO

Introduction to Programming: Matlab, Graduate course

Department of Psychology, University of California, Davis, Davis, CA

Laboratory in the Analysis of Psychological Data, Undergraduate course

Department of Psychological & Brain Sciences, Johns Hopkins University, Baltimore, MD

### **Mentorship Highlights**

2021 Former professional research assistant Linh Nguyen accepted in to PhD program in Cognition and Neuroscience at University of Texas, Dallas.

2019 Former undergraduate student and professional research assistant Cailey Salagovic accepted into PhD program in Psychology at Western University, London, Canada

2019 Undergraduate student Tammy Nguyen accepted into Masters' program with opportunity to continue into PhD at the School of Education, University of Rochester

2019 Undergraduate student Adam Vilanova-Goldstein accepted into PhD program in Psychology at the University of Notre Dame, Notre Dame, Indiana

2018 Undergraduate student Alex Morales receives the CU Denver EURēCA! Travel Award to present at the annual Vision Sciences Society meeting

- 2018 Undergraduate student Tammy Nguyen receives a McNair Fellowship
- 2017 Undergraduate student Cailey Salagovic receives CLAS Dean's Undergraduate Travel Award to present at Auditory Perception Cognition Action and Memory conference
- 2015 Undergraduate student at UC Davis Matthew Elliot hired as a professional research assistant at MIND Institute and subsequently accepted into UC Berkeley PhD program

**Departmental Service**

- 2017 - current Co-advisor for the CU Denver Psi Chi Honor Society
- 2016 - current Psychology Department Human Subjects Research Pool Committee member
- 2016 - current Psychology Department Undergrad Curriculum Committee member
- 2017 - current Served as a member on 7 Psychology Honors Program thesis committees
- 2016 – current CU Denver Psychology Department Teaching Brown Bag Seminar Participant (meets monthly)
- 2014 – 2015 Organizer of weekly cognitive seminar at Center for Mind and Brain
- 2008 – 2016 Organizer of informal attention journal club at UC Davis
- 2014 Departmental faculty promotion review committee member at UC Davis
- 2003 – 2008 Graduate program Steering Committee representative at the Johns Hopkins Department of Psychological & Brain Sciences

**College and University Service**

- 2019 Committee to review applications for the Creative Research Collaboration Interdisciplinary Fellowship
- 2019 Presentation on developing a professional network at the CU Denver McNair Summer Kick-off Luncheon
- 2016 – 2020 Judge at the annual CU Denver Research and Creative Activities Symposium\
- 2016 – 2019 Participant in the annual CU Succeed Workshop
- 2018 Hosted 3 students enrolled in the CU Denver Entering Research course

**Professional Service**

- 2021 – current Associate Editor, *Cognitive, Affective, and Behavioral Neuroscience*

- 2018 – current Editorial Board, *Journal of Experimental Psychology: Human Perception & Performance*
- 2018 – current Organizer for Cognitive Science Association for Interdisciplinary Learning conference
- 2018 Judge for awards sponsored by *Visual Cognition* at OPAM conference
- 2016 Reviewer for National Science Foundation: Perception, Action & Cognition Program
- 2016 – current Ad hoc reviewer for journals including: *Psychonomic Bulletin & Review, Attention, Perception, & Psychophysics, Schizophrenia Bulletin, Philosophical Psychology, Journal of Experimental Psychology: Human Perception & Performance, Journal of Neuroscience, PLOS One, Visual Cognition*
- 2015 Reviewer for the Israeli Science Foundation
- 2013 – 2014 Northern California Consciousness conference, assistant organizer
- 2010 - 2012 Object Perception, Attention & Memory (OPAM) conference, co-organizer

**Community Service**

- 2018 – current Volunteer at the Right Step in Littleton, CO, which is a non-profit that offers therapeutic riding lessons and equestrian activities to special populations
- 2012 – 2016 Volunteered to organize Brain Awareness presentations for Northern California public schools
- 2007 – 2008 Volunteered to help with Brain Awareness presentations at the Baltimore Polytechnic Institute

**Awards and Honors**

- UC Davis Social Sciences Dean's Postdoctoral Fellowship for Excellence, 2012
- Fellowship to Event-Related Potential Bootcamp, 2008
- Fellowship to Summer Institute in Cognitive Neuroscience at Dartmouth College, 2006
- NIH Visual Neuroscience Training Grant, Wilmer Eye Institute, 2004-2006
- Rutgers College Honors Program Research Grant, 2002
- Richard E. Gruen Memorial Scholarship, 2002
- Henry Rutgers Scholars Program, 2001-2002